BY
V-BRO PRODUCTS

RESIDENTIAL MOTORIZED STORAGE UNIT

Model: GGR220

INSTALLATION AND OPERATING INSTRUCTIONS

Distributed Exclusively by
V-BRO PRODUCTS

www.GarageGator.com

For technical questions and replacement parts, please call 1-888-GATOR-08

Save this manual for future reference.

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When you see the ⚠ WARNING safety symbol on the following pages this will alert you of the possibility of serious injuries or death if you do not comply with the corresponding instructions. The hazard may come from something mechanical or from electric shock. Read the instructions carefully!

⚠ WARNING

To reduce the risk of severe injury or death:

1. READ AND FOLLOW ALL SAFETY, INSTALLATION AND OPERATION INSTRUCTIONS. If you have any questions or do not understand an instruction contact V-Bro Products.

2. Do not use to lift people or animals.

3. Do not use to support a load over people or animals.

4. Never operate while hand(s) are near moving parts.

5. Do not stand under lift.

6. Let unit cool down for 10 minutes after every cycle.

☐ Power drill with 1/16" wood drill bit

☐ Step ladder

☐ Pliers

☐ Safety glasses

☐ Ratchet and ½" socket

☐ Adjustable, open ended wrench

☐ Phillips screwdriver

☐ Tape measure

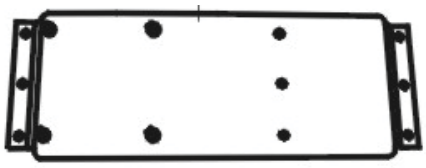
☐ Pencil

☐ Stud finder (optional)

Carefully inspect your new motorized storage unit for any possible damage and/or shortage of parts. Separate all major components and parts as detailed below and on the next page. Do not attempt installation if parts are damaged or missing. If parts of your GGR220 are missing or appear damaged call V-Bro customer service at 1-888-GATOR-08, Monday - Friday, 8:00 AM to 5:00 PM Eastern Time. Before calling carefully check the carton as parts may be in the packing material.

MAJOR COMPONENTS

Motor Mounting Plate (A)

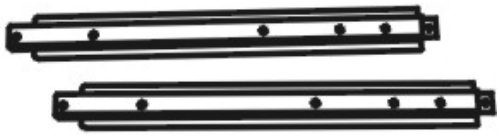


IMPORTANT NOTE

The motor mounting plate (A) and motor hoist (B) are bolted together when shipped. ***IT IS NECESSARY*** to remove the motor hoist from the motor mounting plate by ***loosening*** (it is not necessary to remove) the nuts from the fixed, threaded bolts on the motor mounting plate. Once loosened, the motor hoist can easily be slid off the motor mounting plate.

Motor Hoist (B)

Spacer Channel Bar x2 (C)

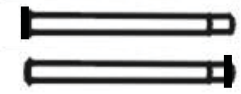


Spacer Channel Pulley Bar (D)

Hook Bar Center x1 (E)

Hook Bar Connector x2 (F)

Hook Bar End x2 (G)



Hooks x8 (H)

Bike Cables x4 (I)

Bonus Storage Net (J)

PARTS

K

3” Lag bolt x12

L

5/16” nut x4
(shipped attached to part A)

T

hand control switch holder hook x1

R

power cord cable clamps x2

S

2” wood screws x2

P

¼” x ½” bolt x2

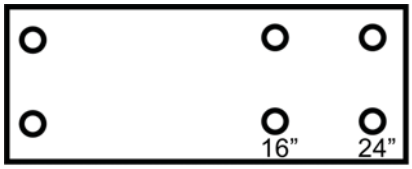
Q

6mm nut x3

R

¾” hole saw drill bit x1

S



paper motor mounting plate template x1

T

13mm socket x1

Drawings & photos for illustrative purposes only – actual parts may vary from those pictured.
Parts are not shown actual size.

Step 1

Determine motor mounting plate location on the ceiling

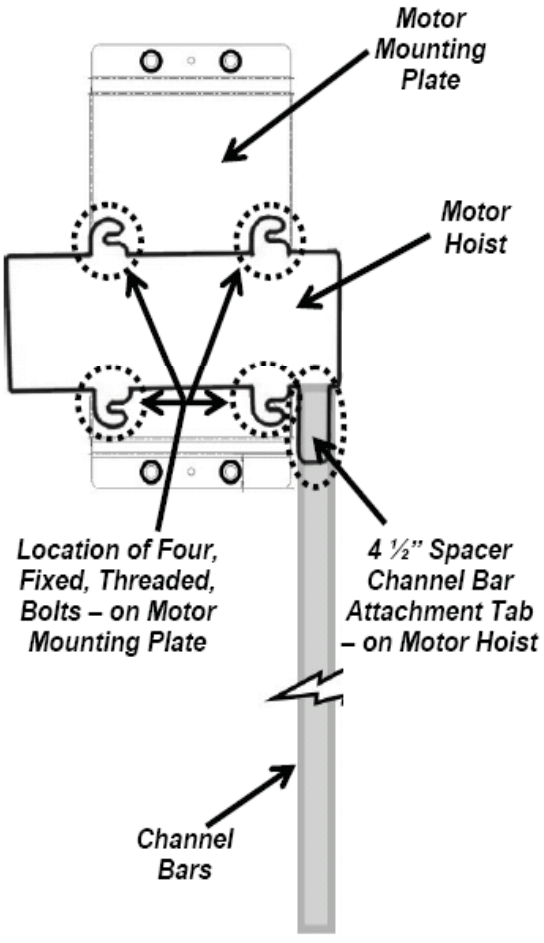
- Choose a location in your garage where you would like to install your Garage Gator model GGR220 - an unobstructed operating space of at least 3 feet by 9 feet is required. The motor mounting plate (A) should be installed at least 3 feet away from walls or any other obstructions.

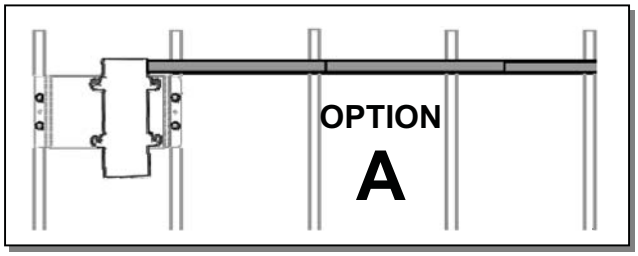
- The GGR220 is designed to be installed either perpendicular or parallel to the ceiling joists and can be installed on joists with 16” or 24” spacing.

- Select an installation location close to a power supply (preferably a ceiling outlet).

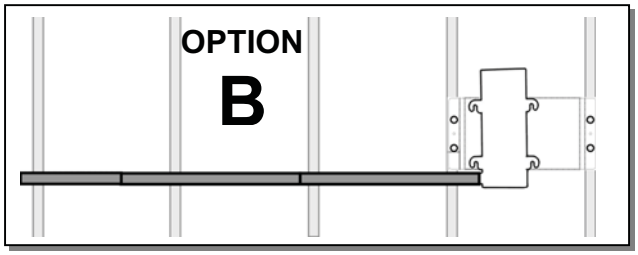
- In the chosen installation area determine the direction of the ceiling joists and the exact location of the ceiling joists by visually checking or using a stud finder or a very fine drill bit.

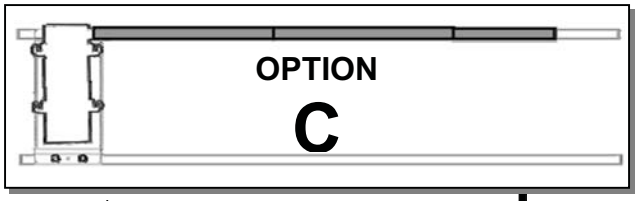
- Four installation options are illustrated below. Note how the motor mounting plate (A) and motor hoist (B) are positioned for your installation - in particular the location of the 4 fixed, threaded bolts on the motor mounting plate and the 4 1/2” spacer channel bar attachment tab on the motor hoist.


Motor Mounting Plate
Motor Hoist
Location of Four, Fixed, Threaded, Bolts – on Motor Mounting Plate
4 ½” Spacer Channel Bar Attachment Tab – on Motor Hoist
Channel Bars

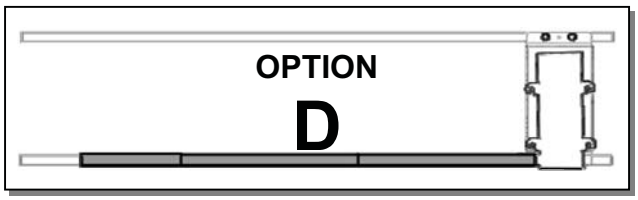


Perpendicular To Joist Installations





Parallel To Joist Installations



Step 2 –

Install the motor mounting plate to the ceiling

- Position the paper motor mounting template (V) in the installation area and mark with a pencil the four locations where the lag bolts will be fastened.
- It is very important that the lag bolts are fastened to the center of the joists. Use the hole saw drill bit (U) or cut away the drywall with a utility knife to obtain an unobstructed view of the width of the joists so the exact center can easily be determined (covered ceilings only). It may be necessary to again use the motor mounting template and a pencil to mark where the lag bolts are to be fastened.
- Using a power drill with a ⅛" drill bit attached drill four pilot holes into the center of the joists.
- Identify your installation option by referring to the illustrations on page 7. Determine how the motor mounting plate should be rotated – where the fixed, threaded bolts should be located – **prior to fastening to the joists**. ***Ensure your motor mounting plate is rotated properly before placing the motor mounting plate on the ceiling. (SEE ILLUSTRATIONS ON PAGE 7)***
- Place the motor mounting plate (A) **without** the motor hoist (B) attached over the screw holes. *(To remove the motor hoist from the motor mounting plate loosen (it is not necessary to remove) the nuts from the fixed bolts on the motor mounting plate and slide off the motor hoist.)*

Using the ratchet and ½" socket fasten four of the 3" lag bolts (K) into the joists until the motor mounting plate is securely fastened. ***(SEE FIG. 1)***

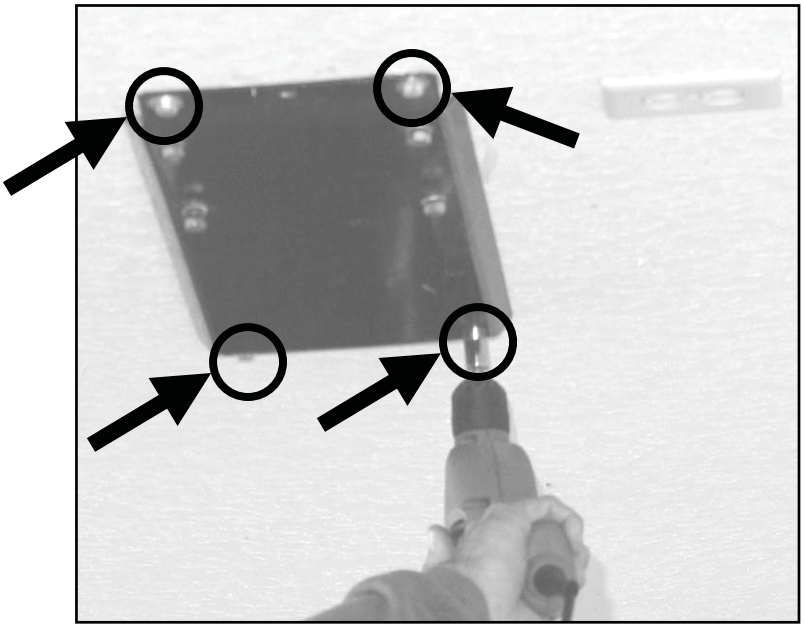


FIG. 1

⚠ WARNING

Motor mounting plate must be fastened to wooden joists in the building framing. ***Do not*** *fasten to drywall, particle board, plaster or other such materials.*

Step 3

Attach the motor hoist to the motor mounting plate.

- Identify your installation option by referring to the illustrations on page 7. Determine how the motor hoist should be rotated – which direction the 4 ½" spacer channel bar attachment tab should be pointing. **Ensure your motor hoist is rotated properly before placing the motor hoist on the motor mounting plate*. (SEE ILLUSTRATIONS ON PAGE 7)***
- Slide the mounting tabs on the motor hoist (B) over top of the four fixed, threaded bolts on the motor mounting plate (A). *(If there is not enough room between the nuts and the motor mounting plate for the motor hoist mounting tabs it will be necessary to loosen the nuts by turning them counter clockwise.)*
- Once the motor hoist is properly positioned on the motor mounting plate you can tighten the nuts with a ratchet or adjustable wrench until the motor hoist is securely attached to the motor mounting plate. ***(SEE FIG. 3)***

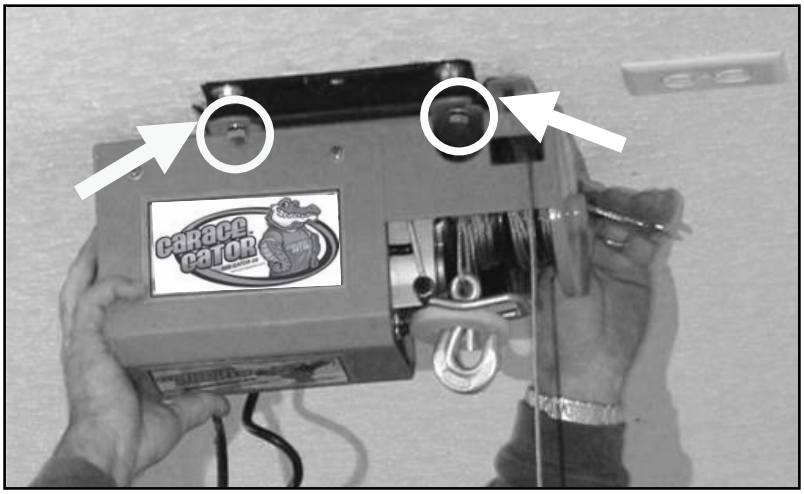


FIG. 3

⚠ WARNING

*Slide the motor hoist until the tabs are firmly against the threaded bolts. **Do not** leave any space between the bolts and the enclosed end of the mounting tabs.*

Step 4

Connect and install the first spacer channel bar

- Insert the flared end (the end without a fixed nut) of a spacer channel bar (C) onto the fixed, threaded bolt coming down from the 4 ½" spacer channel bar attachment tab on the motor hoist (B). ***(SEE FIG. 4)***
- Press the spacer channel bar flush with the ceiling and mark with a pencil where a lag bolt will be used to attach the bar to the joist.
  --Perpendicular joist installation (option A or B on page 7). Make a mark at either the 16" hole or 24" hole depending on your joist spacing. Remove the spacer channel bar.
  --Parallel joist installation (option C or D on page 7). Make a mark at the 21" hole. Remove the spacer channel bar.
- It is very important that the lag bolt is fastened to the center of the joist. Use the hole saw drill bit (U) or cut away the drywall with a utility knife to obtain an unobstructed view of the width of the joist so the exact center can easily be determined. It may be necessary to reposition the spacer channel pulley bar and mark with a pencil where the lag bolt is to be fastened.
- Using a power drill with a ⅛" drill bit attached drill a pilot hole into the center of the joist.
- Insert the flared end (the end without a fixed nut) of a spacer channel bar onto the fixed bolt coming down from the motor plate tab above the cable spools on the motor hoist. ***(SEE FIG. 4)***
- Attach a 6mm nut (Q) to the fixed bolt and tighten with a ratchet or adjustable wrench until the spacer channel bar is securely fastened to the motor hoist. ***(SEE FIG. 4)***
- Place a lag bolt(s) (K) and using the ratchet fasten the bolts(s) into the joist(s) until the spacer channel bar is securely fastened.

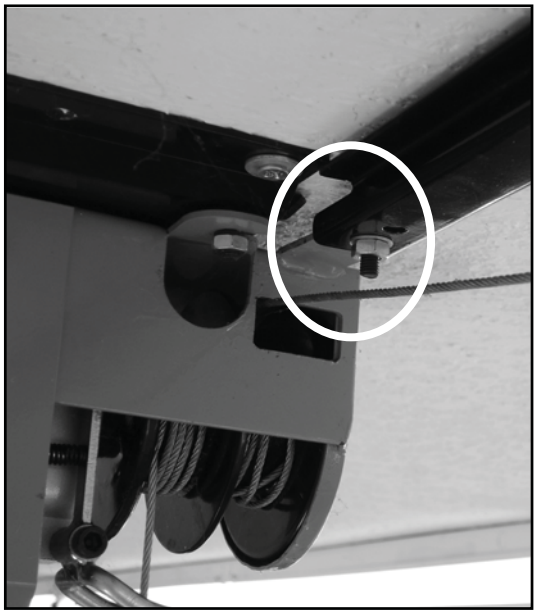


FIG. 4

Step 5

Connect and install the second spacer channel bar

- Line up the hole in the flared end (the end without a fixed nut) of the spacer channel bar (C) over the hole in the installed spacer channel pulley bar. Thread a ¼" x ½" bolt (P) into the hole and finger tighten. ***(SEE FIG. 5)***
- Press the spacer channel bar flush with the ceiling and mark with a pencil where the lag bolt(s) will be used to attach the bar to the joist(s).
  --Perpendicular joist installation (option A or B on page 7). There are holes in the spacer channel bar at 16", 24" and 32" from the lag bolt in the first installed spacer channel bar. Measure from the lag bolt and determine the appropriate hole(s) depending on your joist spacing. *(Installations with 16" spacing will insert two lag bolts in this spacer channel bar – at 16" and 32" from the first lag bolt. Installations with 24" spacing will have one lag bolt)*. Remove the spacer channel bar.
  --Parallel joist installation (option C or D on page 7). Make marks at the 5" and 21" holes on the spacer channel bar – measuring from the flared end of this spacer channel bar. Remove the spacer channel bar.
- It is very important that the lag bolts is fastened to the center of the joist(s). Use the hole saw drill bit (U) or cut away the drywall with a utility knife to obtain an unobstructed view of the width of the joist(s) so the exact center can easily be determined. It may be necessary to reposition the spacer channel pulley bar and mark with a pencil where the lag bolts(s) are to be fastened.
- Using a power drill with a $\frac{1}{16}$" drill bit attached drill pilot holes(s).
- Line up the hole in the flared end (the end without a fixed nut) of the spacer channel bar (C) over the hole in the installed spacer channel pulley bar. Thread a ¼" x ½" bolt into the hole and tighten with a ratchet or adjustable wrench until the spacer channel bar is securely fastened. ***(SEE FIG. 5)***
- Place a lag bolt(s) (K) and using the ratchet fasten the bolts(s) into the joist(s) until the spacer channel bar is securely fastened.

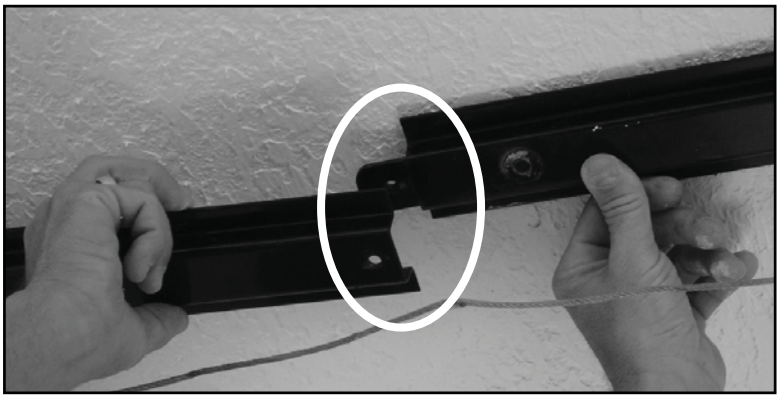


FIG. 5

Step 6

Connect and Install the spacer channel pulley bar

- Line up the hole in the end opposite the pulley of the spacer channel pulley bar (D) over the hole in the second spacer channel pulley bar. Thread a ¼" x ½" bolt (P) into the hole and finger tighten. ***(SEE FIG. 6)***
- Press the spacer channel bar flush with the ceiling and mark with a pencil where the lag bolts will be used to attach the bar to the joist.
  --Perpendicular joist installation (option A or B on page 7). There are sets of holes on each side of spacer channel bar at 16" and 24" from the ***last*** lag bolt installed. Measure from the last lag bolt and determine the appropriate holes depending on your joist spacing. Remove the spacer channel pulley bar.
  --Parallel joist installation (option C or D on page 7). Make marks at one hole before the pulley and one hole after the pulley. Remove the spacer channel pulley bar.
- It is very important that the lag bolts are fastened to the center of the joist. Use the hole saw drill bit (U) or cut away the drywall with a utility knife to obtain an unobstructed view of the width of the joist so the exact center can easily be determined. It may be necessary to reposition the spacer channel pulley bar and mark with a pencil where the lag bolts are to be fastened.
- Using a power drill with a 1⁄8" drill bit attached drill two pilot holes into the center of the joists.
- Line up the hole in the end opposite the pulley of the spacer channel pulley bar (D) over the hole in the second spacer channel pulley bar. Thread a ¼" x ½" bolt into the hole and tighten with a ratchet or adjustable wrench until the spacer channel pulley bar is securely fastened. ***(SEE FIG. 6)***
- Place a washer (L) over the lag bolts (K) and using the hex key (W) fasten the screws into the joist until the spacer channel pulley bar is securely fastened to the joist.

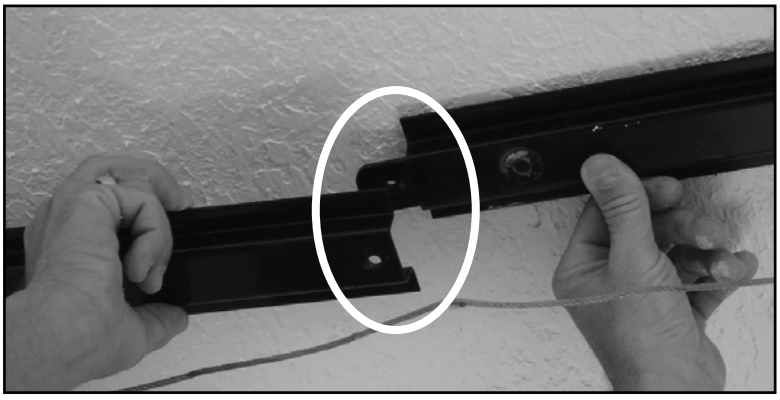


FIG. 6

Step 7

Install the cable over the channel bar pulley

- Plug in the motor hoist (B) to the nearest 110 volt power outlet.
- Use the hand control switch and safely lower the cables until 9 feet of cable is visible.
- Unplug the power cord from the outlet.
- Temporarily remove the pulley at the end of the spacer channel pulley bar (D) *(use pliers to remove the cotter pin then remove the clevis pin to release the pulley)* ***(SEE FIG. 7A & 7D)***

⚠ WARNING

To reduce the risk of electrical shock, this equipment has a grounded type plug that includes a third (grounding) pin. This plug will only fit a grounded type outlet. If you do not have a grounded outlet, contact a qualified electrician to install one. DO NOT alter the plug in any way.

- Place the cable coming out of the rectangular opening closest to the spacer channel bar (*indicated by arrow in figure 7B)* over the top of the pulley at the end of the spacer channel pulley bar. ***(SEE FIG. 7B & 7C)***
  CAUTION: Use care when handling the cables – frayed or rough spots on the cable could cause injury.
- Once the cable has been placed over the pulley reinstall the pulley to its original position, insert the clevis pin and refasten the cotter pin. ***(SEE FIG. 7D)***

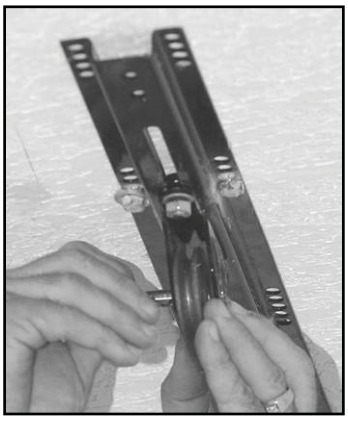


FIG. 7A

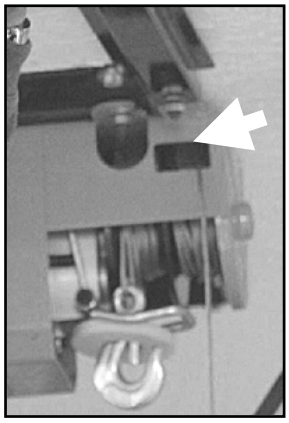


FIG. 7B

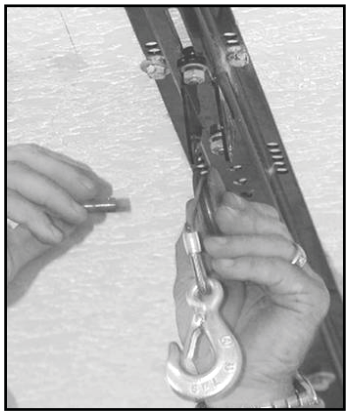


FIG. 7C

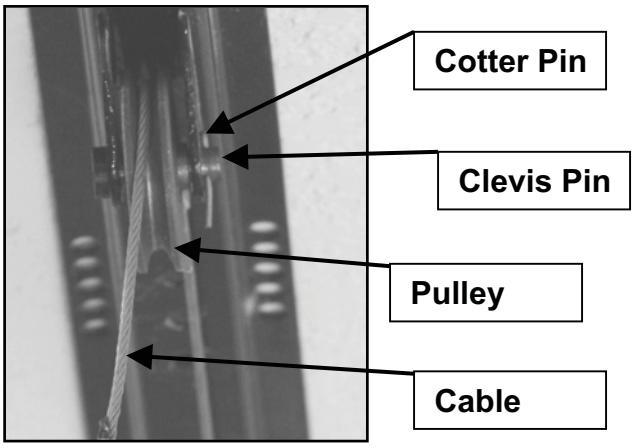


FIG. 7D

⚠ WARNING

Be sure to bend the two legs of the cotter pin to ensure that the clevis pin does not slip out.

Step 8

Assemble the hook bar

- Assemble the three middle pieces of the hook bar by lining up the spring clips from the hook bar center (E) to the holes of the hook bar connectors (F). ***(SEE FIG. 8A)***
- Slide hooks (H) and bike cables (I) onto the assembled piece. ***(SEE FIG. 8B & 8C)***
- Attach each hook bar end (G) to the assembled middle section by lining up the slotted holes from the hook bar end to the holes of the hook bar connectors. ***(SEE FIG. 8D)***

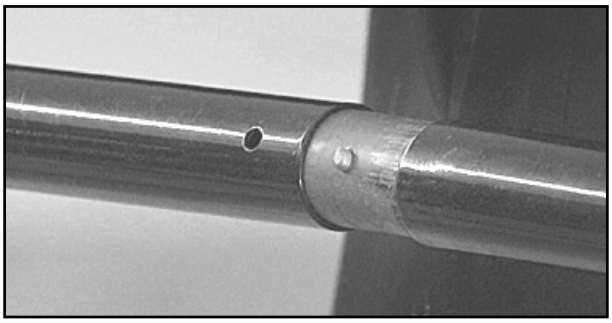


FIG. 8A

⚠ WARNING

*Be sure the spring clips are **fully inserted** into the connector bars.*

FIG. 8B

FIG. 8C

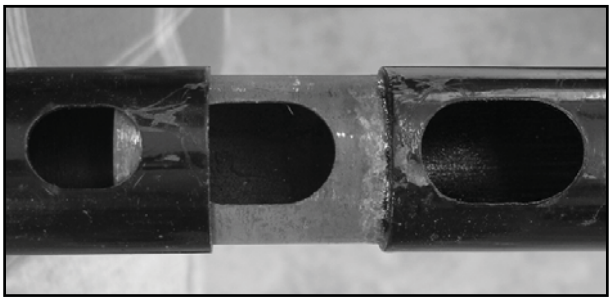


FIG. 8D

Step 9

Attach the hook bar to the cables

- Attach the hooks at the end of the cables to the hook bar by pressing in the spring clip and inserting the hook into the opening on the hook bar. ***(SEE FIG. 9)***. Insert each hook so the spring clip on the hook is pointing toward the hook bar center (E).

NOTE: *You may wish to slide a hook or bike cable to the hook bar end sections – the area on the far side of the hook – before attaching the hook to the bar.*

FIG. 9

Step 10

Install the hand control switch holder hook

- Secure the hand control switch holder hook (T) to a convenient location on the closest appropriate wall by removing the protective paper from the adhesive strip then adhere the hook to the wall by applying pressure with your fingers. ***(SEE FIG. 10)***

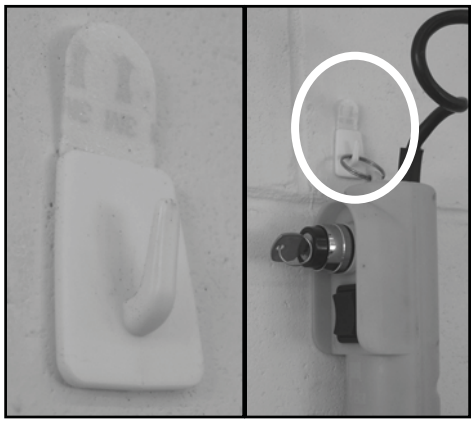


FIG. 10

Step 11

Plug in the unit

- Plug in the motor hoist (B) to the nearest 120 volt power outlet. You may wish to use the power cord cable clamps (R) and the 2" wood screws (S) to secure the power cord or extension cord (not provided) to the ceiling or wall.

Step 12

Test the unit

- Press and hold the rocker switch on the hand control to raise and lower the hook bar. When the hook bar reaches the uppermost travel point the ring above the cable hook will trigger the limit switch ceasing upward movement. ***(SEE FIG 11)***

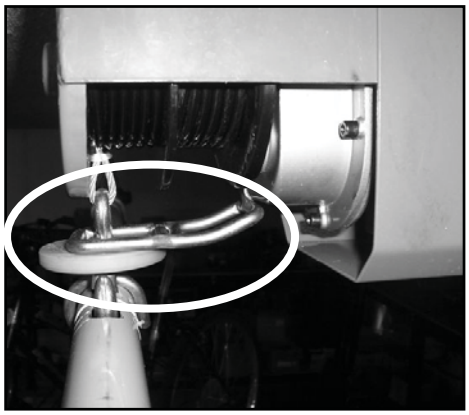


FIG. 11

Step 13

Using the key lock feature

- To prevent unauthorized use the GG220 is equipped with a key lock feature. ***(SEE FIG. 12)***
- When the key is turned to the "OFF" position and removed from the hand control switch the unit will not function until the key is reinserted and turned to the "ON" position.

FIG. 12

TO RAISE OR LOWER THE HOOK BAR:

- Do not stand under the lift.
- Turn the key in the hand control switch to the "ON" position.
- Press and hold the rocker switch in the direction you want the hook bar to travel.
- Release the switch when the desired location is reached.

TO LOAD THE HOOK BAR:

- Lower the hook bar to a comfortable height.
- Evenly distribute the weight of articles stored.
- Do not overload the hook bar – maximum capacity is 220 pounds.
- Be sure items are secured before raising the hook bar.

Examples of items that can be stored:

Bikes

- Loop one piece of the bike cable through the rim of the front tire then connect the clip to the oblong ring attached to the hook bar.
- Loop the second piece of the bike cable through the rim of the back tire then connect the clip to the oblong ring attached to the hook bar.

****Use the hooks to hold bikes securely in place, by placing the red end of the hook around the neck of the bike seat. *See Fig 13.***

Golf bags

- Golf bags should be hung by the carrying handle – NOT the shoulder strap.

Canoe/Kayak – *(capacity on hook bar must not exceed 220 pounds)*

Spare tires

Storage net – ideal for balls, toys, helmets, etc.

Ladders

Tools

Figure 13

DO NOT OVERLOAD THE HOOK BAR.

Maximum capacity is 220 pounds for all articles on the hook bar.

CONTACT INFORMATION

Garage Gator Motorized Storage Unit

V-Bro Products is on call. Installation and service information as well as ordering repair parts is as near as your telephone Monday – Friday 8:00 AM to 5:00 PM Eastern Time (subject to holidays). Contact us toll free.

V-Bro Products
28114 County Road 561
Tavares, Florida 32778
888-GATOR-08
fax: 352-742-0702
email: info@garagegator.com

1-888-GATOR-08

MAINTENANCE

Garage Gator Motorized Storage Unit

1. Check to be sure the motor is properly attached to its mounting plate. Make sure the bolts are tight.
2. Periodically check the condition of the electrical cords, plugs and controls.

SPECIFICATIONS

Garage Gator Motorized Storage Unit

Model----------Garage Gator 220
Load Capacity----------220 lbs
Lifting Height----------117 inches
Lifting Speed----------33 ft/min
Cable Length----------165 inches
Cable Diameter----------1/8 inch
Voltage----------120V / 60 HZ 4.5 Amps
Motor----------3/4 HP

LIMITED WARRANTY

What is covered: Any defect in material and workmanship from personal, normal household use in accordance with the Owner's Manual.
For how long: Garage Gator Model 220. One year from date of purchase.
Who Gets the Warranty: The warranty is limited to the consumer who originally purchased the product.
Geographic Scope: This warranty applies only to the Residential Motorized Storage Unit purchased in the United States and Canada.
What we will do: If your Residential Motorized Storage Unit is defective, we will send replacement parts or, at our option, replace it at no charge to you. If we send replacement parts for your Residential Motorized Storage Unit, we may use new or reconditioned parts. If we choose to replace your Residential Motorized Storage Unit, we may replace it with a new or reconditioned one of the same or similar design.
Limitations: IMPLIED WARRANTIES, INCLUDING THOSE OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY (AN UNWRITTEN WARRANTY THAT THE PRODUCT IS FIT FOR ORDINARY USE) ARE LIMITED TO ONE YEAR FROM DATE OF PURCHASE. WE WILL NOT PAY FOR: LOSS OF USE OF YOUR RESIDENTIAL MOTORIZED STORAGE UNIT OR PROPERTY DAMAGE CAUSED BY YOUR RESIDENTIAL MOTORIZED STORAGE UNIT OR ITS FAILURE TO WORK ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES; ANY DAMAGES RESULTING FROM MISUSE OR MODIFICATION OF YOUR RESIDENTIAL MOTORIZED STORAGE UNIT. Some states and provinces do not allow limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above exclusions may not apply.
How to get Warranty Service: To get warranty service for your Residential Motorized Storage Unit, you must provide proof of date and place of purchase of the product. Trained representatives will assist in diagnosing the problem and will arrange to supply you with required parts for repairs.
What This Warranty Does Not Cover: This warranty does not cover installation, commercial use, defects resulting from accidents, damage while in transit to our service location or damage resulting from alterations, misuses or abuse, lack of proper maintenance, unauthorized repair or modifications of the product, affixing of any attachment not provided with the product, staples through wiring, pinched or broken wires, broken cables, power outages, use of extension cords, missing or damaged parts or discounted, clearance, final sale or taped cartons, fire, flood, acts of God, or failure to follow the Owner's Manual. **This warranty is the only one we will give on your Residential Motorized Storage Unit, and it sets forth all our responsibilities regarding your Residential Motorized Storage Unit. There are no other express warranties.**
State and Province Rights: This warranty gives you specific legal rights, and you may also have other rights that vary from state to state and province to province.

PARTS LIST

1. Motor housing assembly
2. Drum assembly with cable & hook
3. Shaft

3A. Snap ring

4. Bearing
5. Gearcase
6. Gear
7. Bearing (2)
8. Middle shaft
9. Gear
10. Front cover
11. Bearing
12. Shell & stator assembly
13. Rotor assembly
14. Brake spring
15. Brake disc
16. Bearing
17. Back end cover
18. Fan
19. Fan cover
20. Motor cover
21. Terminal box
22. Control handle
23. Condenser
24. Rocker switch
25. Key lock
26. Cable strain relief
27. Motor mounting plate
28. Channel spacer bars A & B
    Channel spacer pulley bar C
29. Lifting bar D & H
    Lifting bar E & G
    Lifting bar F
30. Lifting hooks
31. Lifting cables
32. J bolts